

## Analysis results of Surface water monitoring under NWMP for the month of August, 2018

### River Satluj

| S.N. | Point of Sample Collection  | Code | Date of receipt in lab | Lab Sample No. | Sample Collected & Analyzed by | pH   | DO mg/l | BOD mg/l | Cond $\mu$ s/Cm | T.Coli MPN/ 100ml | F. Coli MPN/ 100ml | Free Amm.N mg/l | SAR  | B mg/l | Quality of water as per DBU | Water Quality Index |
|------|---|------|------------------------|----------------|--------------------------------|------|---------|----------|-----------------|-------------------|--------------------|-----------------|------|--------|-----------------------------|---------------------|
| 1    | River Satluj at U/S Nangal  | 1017 | 20.8.18                | 136            | ZO Lab Ldh                     | 7.95 | 8.4     | <1       | 238             | 220               | 37                 | 0.030           | 0.37 | 0.20   | B                           | S                   |
| 2    | River Satluj at D/S NFL   | 1380 | 20.8.18                | 138            | ZO Lab Ldh                     | 7.75 | 8.0     | <1       | 284             | 390               | 92                 | 0.028           | 1.60 | 0.23   | B                           | S                   |
| 3    | River Sutej at 100m D/s PACL Nangal                                 | 2915 | 20.8.18                | 139            | ZO Lab Ldh                     | 7.60 | 8.0     | <1       | 314             | 450               | 180                | 0.020           | 1.62 | 0.18   | B                           | S                   |
| 4    | River Satluj at D/s Nangal  | 1018 | 20.8.18                | 137            | ZO Lab Ldh                     | 7.79 | 8.2     | <1       | 260             | 310               | 45                 | 0.021           | 0.46 | 0.26   | B                           | S                   |
| 5    | River Satluj at Kiratpur Sahib                                      | 1814 | 21.8.18                | 141            | ZO Lab Ldh                     | 7.66 | 8.0     | <1       | 364             | 810               | 360                | 0.018           | 0.75 | 0.28   | C                           | S                   |
| 6    | Ropar Head-Works  | 1019 | 21.8.18                | 143            | ZO Lab Ldh                     | 7.68 | 8.4     | <1       | 267             | 1000              | 200                | 0.030           | 0.61 | 0.26   | C                           | S                   |
| 7    | River Satluj D/S of Rishab-Paper Mills                              | 1293 | 21.8.18                | 144            | ZO Lab Ldh                     | 7.71 | 8.3     | <1       | 313             | 1100              | 200                | 0.012           | 0.41 | 0.32   | C                           | S                   |
| 8    | River Satluj U/S Buddha Nallah                                      | 1690 | 22.8.18                | 150            | ZO Lab Ldh                     | 7.61 | 7.2     | <1       | 317             | 2100              | 400                | 0.020           | 0.53 | 0.22   | C                           | S                   |
| 9    | River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana | 1020 | 22.8.18                | 152            | ZO Lab Ldh                     | 7.24 | 4.0     | 30       | 611             | 4,00,000          | 2,20,000           | 0.010           | 2.04 | 0.31   | D                           | N                   |
| 10   | River Satluj at Boat Bridge, Dharamkot Nakodar Road                 | 1021 | 23.8.18                | 159            | ZO Lab Ldh                     | 7.43 | 7.0     | 10       | 393             | 63000             | 26000              | 0.024           | 2.33 | 0.20   | D                           | N                   |
| 11   | River Satluj at D/s East Bein                                       | 1381 | 27.8.18                | 30             | ZO Lab Jal.                    | 7.5  | 4.0     | 5.2      | 556             | 28000             | 17000              | 0.144           | 4.14 | BDL    | D                           | N                   |
| 12   | River Satluj at Harike  | 1022 | 27.8.18                | 31             | ZO Lab Jal.                    | 7.7  | 5.9     | 3.2      | 399             | 17000             | 11000              | 0.126           | 1.97 | BDL    | D                           | N                   |
| 13   | Harike Lake D/S from canal  | 1382 | 27.8.18                | 32             | ZO Lab Jal.                    | 7.8  | 7.2     | 2.2      | 278             | 3500              | 1700               | 0.084           | 1.07 | BDL    | C                           | S                   |
| 14   | D/S Harike lake   | 1297 | 27.8.18                | 33             | ZO Lab Jal.                    | 7.6  | 7.3     | 2.0      | 284             | 3500              | 2200               | 0.070           | 1.03 | 0.20   | C                           | S                   |
| 15   | U/S Hussainiwala H/W Ferozepur                                      | 1691 | 23.8.18                | 160            | ZO Lab Ldh                     | 7.68 | 7.8     | <1       | 270             | 820               | 200                | 0.024           | 2.04 | 0.12   | C                           | S                   |
| 16   | D/S Hussainiwala H/W Ferozepur                                      | 1692 | 23.8.18                | 161            | ZO Lab Ldh                     | 7.61 | 7.6     | <1       | 282             | 830               | 370                | 0.025           | 1.66 | 0.16   | C                           | S                   |

**Note. 1. BDL means Below Method Detection Limit**

**2. DBU means Designated Best Use (Class-A,B,C,D & E)**

**3. Water Quality Index ( S means Satisfactory, N means Not Satisfactory)**

**4. U/s means Upstream , D/s means Downstream**

## Analysis results of Surface water monitoring under NWMP for the month of August, 2018

### River Satluj

| S.N. | Point of Sample Collection  | Code | Date of receipt in lab | Lab Sample No. | Sample Collected & Analyzed by | COD mg/l | Turb NTU | TSS mg/l | TDS mg/l | FDS mg/l | Cl mg/l | SO <sub>4</sub> mg/l | TH mg/l | Ca mg/l | Mg mg/l | T.Alkn mg/l | P.Alkn mg/l | Amn-N mg/l | NO <sub>3</sub> -N mg/l | TKN mg/l | PO <sub>4</sub> P mg/l | F mg/l | Na mg/l | K mg/l |
|------|---|------|------------------------|----------------|--------------------------------|----------|----------|----------|----------|----------|---------|----------------------|---------|---------|---------|-------------|-------------|------------|-------------------------|----------|------------------------|--------|---------|--------|
| 1    | River Satluj at U/S Nangal  | 1017 | 20.8.18                | 136            | ZO Lab Ldh                     | <5       | 9        | 10       | 136      | 124      | 14      | 16                   | 65      | 20      | 3.6     | 40          | BDL         | 0.6        | 0.4                     | 1.8      | 0.6                    | 0.4    | 6.8     | 2.41   |
| 2    | River Satluj at D/S NFL   | 1380 | 20.8.18                | 138            | ZO Lab Ldh                     | <5       | 10       | 12       | 194      | 180      | 22      | 21                   | 85      | 23.2    | 6.48    | 55          | BDL         | 0.8        | 1.2                     | 2.4      | 0.8                    | 0.6    | 33.9    | 8.18   |
| 3    | River Sutej at 100m D/s PACL Nangal                                 | 2915 | 20.8.18                | 139            | ZO Lab Ldh                     | <5       | 12       | 13       | 213      | 200      | 20      | 21                   | 65      | 19.2    | 4.08    | 50          | BDL         | 0.8        | 1.4                     | 2.8      | 1.0                    | 0.4    | 30      | 7.68   |
| 4    | River Satluj at D/s Nangal  | 1018 | 20.8.18                | 137            | ZO Lab Ldh                     | <5       | 11       | 12       | 170      | 160      | 16      | 18                   | 70      | 20      | 4.8     | 45          | BDL         | 0.6        | 0.8                     | 2.0      | 0.8                    | 0.6    | 8.9     | 3.04   |
| 5    | River Satluj at Kiratpur Sahib                                      | 1814 | 21.8.18                | 141            | ZO Lab Ldh                     | 5.3      | 11       | 13       | 255      | 240      | 28      | 26                   | 75      | 20.8    | 5.52    | 75          | BDL         | 0.6        | 1.0                     | 1.8      | 0.6                    | 0.4    | 14.98   | 3.96   |
| 6    | Ropar Head-Works  | 1019 | 21.8.18                | 143            | ZO Lab Ldh                     | <5       | 12       | 14       | 209      | 190      | 25      | 28                   | 70      | 19.2    | 5.28    | 65          | BDL         | 1.0        | 0.8                     | 2.6      | 0.4                    | 0.4    | 11.80   | 3.40   |
| 7    | River Satluj D/S of Rishab- Paper Mills                             | 1293 | 21.8.18                | 144            | ZO Lab Ldh                     | 5.3      | 13       | 19       | 258      | 234      | 30      | 22                   | 80      | 23.2    | 5.28    | 75          | BDL         | 0.4        | 1.0                     | 2.0      | 0.4                    | 0.6    | 8.49    | 2.97   |
| 8    | River Satluj U/S Buddha Nallah                                      | 1690 | 22.8.18                | 150            | ZO Lab Ldh                     | 8.0      | 14       | 20       | 234      | 202      | 21      | 18                   | 76      | 16      | 8.64    | 56          | BDL         | 0.8        | 1.2                     | 1.8      | 0.8                    | 0.6    | 10.53   | 3.68   |
| 9    | River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana | 1020 | 22.8.18                | 152            | ZO Lab Ldh                     | 124      | 30       | 56       | 387      | 320      | 72      | 54                   | 112     | 25.6    | 11.52   | 70          | BDL         | 1.0        | 4.0                     | 2.2      | 2.0                    | 1.0    | 49.39   | 12.68  |
| 10   | River Satluj at Boat Bridge, Dharamkot Nakodar Road                 | 1021 | 23.8.18                | 159            | ZO Lab Ldh                     | 36       | 19       | 28       | 236      | 192      | 20      | 24                   | 68      | 16      | 6.72    | 58          | BDL         | 1.6        | 1.0                     | 3.8      | 1.2                    | 0.1    | 44      | 8      |
| 11   | River Satluj at D/s East Bein                                       | 1381 | 27.8.18                | 30             | ZO Lab Jal.                    | 32       | 34       | 142      | 325      | 226      | 44      | 38                   | 132     | 42      | 7       | 110         | BDL         | 7.2        | 1.4                     | 12.6     | 0.24                   | 0.20   | 110     | 12.4   |
| 12   | River Satluj at Harike  | 1022 | 27.8.18                | 31             | ZO Lab Jal.                    | 20       | 28       | 204      | 245      | 210      | 20      | 28                   | 116     | 32      | 9       | 119         | BDL         | 4.2        | 1.2                     | 6.4      | 0.18                   | 0.16   | 49      | 11.9   |
| 13   | Harike Lake D/S from canal  | 1382 | 27.8.18                | 32             | ZO Lab Jal.                    | 16       | 38       | 224      | 190      | 146      | 18      | 22                   | 104     | 38      | 2       | 121         | BDL         | 2.4        | 1.4                     | 3.6      | 0.16                   | 0.14   | 25      | 5.6    |
| 14   | D/S Harike lake   | 1297 | 27.8.18                | 33             | ZO Lab Jal.                    | 16       | 46       | 240      | 186      | 154      | 20      | 24                   | 100     | 26      | 9       | 109         | BDL         | 2.8        | 1.2                     | 3.4      | 0.20                   | 0.16   | 24      | 5.5    |
| 15   | U/S Hussainiwala H/W Ferozepur                                      | 1691 | 23.8.18                | 160            | ZO Lab Ldh                     | 8.0      | 15       | 18       | 162      | 150      | 17      | 16                   | 56      | 14.4    | 4.8     | 52          | BDL         | 0.8        | 0.8                     | 1.4      | 0.8                    | 0.3    | 35      | 6      |
| 16   | D/S Hussainiwala H/W Ferozepur                                      | 1692 | 23.8.18                | 161            | ZO Lab Ldh                     | 8.8      | 16       | 20       | 180      | 164      | 19      | 18                   | 62      | 16      | 5.28    | 54          | BDL         | 1.0        | 0.8                     | 1.8      | 1.0                    | 0.2    | 30      | 4      |

Note. 1.BDL means Below Method Detection Limit  
2. U/s means Upstream , D/s means Downstream

## Analysis results of Surface water monitoring under NWMP for the month of August, 2018

### River Beas

| S.N. | Point of Sample Collection  | Code | Date of receipt in lab | Lab Sample No. | Sample Collected & Analyzed by | pH  | DO mg/l | BOD mg/l | Cond $\mu$ s/Cm | T. Coli MPN/100ml | F. Coli MPN/100ml | Free Amm.N mg/l | SAR  | B mg/l | Quality of water as per DBU | Water Quality Index |
|------|---|------|------------------------|----------------|--------------------------------|-----|---------|----------|-----------------|-------------------|-------------------|-----------------|------|--------|-----------------------------|---------------------|
| 17   | River Beas at Talwara H/W   | 1693 | 21.8.18                | 13             | ZO Lab Jal.                    | 7.5 | 7.6     | 1.0      | 220             | 79                | 49                | BDL             | 0.74 | BDL    | B                           | S                   |
| 18   | River Beas at U/S Pathankot   | 1694 | 21.8.18                | 15             | ZO Lab Jal.                    | 7.8 | 7.4     | 1.4      | 253             | 460               | 230               | BDL             | 0.58 | BDL    | B                           | S                   |
| 19   | River Beas at D/S Pathankot   | 1695 | 21.8.18                | 16             | ZO Lab Jal.                    | 7.8 | 7.2     | 1.6      | 276             | 490               | 330               | 0.011           | 0.67 | BDL    | B                           | S                   |
| 20   | River Beas at Mirthal Bridge Gurdaspur (Pb.)                              | 1010 | 21.8.18                | 14             | ZO Lab Jal.                    | 7.4 | 7.6     | 1.4      | 293             | 170               | 110               | BDL             | 0.67 | BDL    | B                           | S                   |
| 21   | River Beas 1 Km D/S effluent discharge point at Mukerian                  | 1294 | 21.8.18                | 17             | ZO Lab Jal.                    | 7.6 | 7.0     | 1.6      | 266             | 790               | 490               | 0.015           | 0.79 | BDL    | C                           | S                   |
| 22   | River Beas at Bridge, village Bheate Patan Tehsil Batala Distt. Gurdaspur | 4164 | 3.8.18                 | 1              | ZO Lab Jal.                    | 7.5 | 7.1     | 1.4      | 259             | 700               | 460               | 0.010           | 0.99 | BDL    | C                           | S                   |
| 23   | River Beas at G.T. Road, under Bridge Near Kapurthalla (Pb)               | 1011 | 3.8.18                 | 2              | ZO Lab Jal.                    | 7.9 | 7.2     | 1.6      | 216             | 460               | 330               | BDL             | 0.75 | BDL    | B                           | S                   |
| 24   | River Beas at U/s Goindwal  | 1696 | 3.8.18                 | 3              | ZO Lab Jal.                    | 7.7 | 7.4     | 1.4      | 250             | 350               | 220               | 0.018           | 0.84 | 0.10   | B                           | S                   |
| 25   | River Beas at D/s Goindwal  | 1012 | 3.8.18                 | 4              | ZO Lab Jal.                    | 7.7 | 7.3     | 1.4      | 226             | 460               | 330               | 0.018           | 0.84 | 0.14   | B                           | S                   |
| 26   | Beas at Harike  | 1697 | 27.8.18                | 29             | ZO Lab Jal.                    | 7.8 | 7.6     | 1.3      | 249             | 350               | 280               | 0.004           | 0.84 | 0.12   | B                           | S                   |

| S.N. | Point of Sample Collection  | Code | Date of receipt in lab | Lab Sample No. | Sample Collected & Analyzed by | COD mg/l | Turb NTU | TSS mg/l | TDS mg/l | FDS mg/l | Cl mg/l | SO <sub>4</sub> Mg/l | TH mg/l | Ca mg/l | Mg mg/l | T.Alkn mg/l | P.Alkn mg/l | Amn-N mg/l | NO3-N mg/l | TKN mg/l | PO <sub>4</sub> as P mg/l | F mg/l | Na mg/l | K mg/l |
|------|---|------|------------------------|----------------|--------------------------------|----------|----------|----------|----------|----------|---------|----------------------|---------|---------|---------|-------------|-------------|------------|------------|----------|---------------------------|--------|---------|--------|
| 17   | River Beas at Talwara H/W   | 1693 | 21.8.18                | 13             | ZO Lab Jal.                    | 10       | 26       | 124      | 150      | 118      | 12      | 10                   | 100     | 35      | 3       | 96          | BDL         | BDL        | 0.6        | BDL      | BDL                       | BDL    | 17      | 4.3    |
| 18   | River Beas at U/S Pathankot   | 1694 | 21.8.18                | 15             | ZO Lab Jal.                    | 16       | 50       | 220      | 175      | 144      | 20      | 14                   | 142     | 47      | 6       | 89          | BDL         | BDL        | 1.2        | BDL      | 0.12                      | 0.12   | 16      | 3.9    |
| 19   | River Beas at D/S Pathankot   | 1695 | 21.8.18                | 16             | ZO Lab Jal.                    | 18       | 42       | 228      | 180      | 148      | 22      | 18                   | 136     | 34      | 13      | 98          | BDL         | 0.3        | 1.0        | 0.5      | 0.14                      | 0.12   | 18      | 4.3    |
| 20   | River Beas at Mirthal Bridge Gurdaspur (Pb.)                              | 1010 | 21.8.18                | 14             | ZO Lab Jal.                    | 12       | 32       | 148      | 190      | 158      | 16      | 12                   | 124     | 33      | 10      | 109         | BDL         | BDL        | 0.8        | BDL      | BDL                       | 0.10   | 17      | 4.2    |
| 21   | River Beas 1 Km D/S effluent discharge point at Mukerian                  | 1294 | 21.8.18                | 17             | ZO Lab Jal.                    | 20       | 52       | 278      | 172      | 140      | 16      | 20                   | 110     | 36      | 5       | 72          | BDL         | 0.6        | 1.6        | 1.2      | 0.16                      | 0.14   | 19      | 6.1    |
| 22   | River Beas at Bridge, village Bheate Patan Tehsil Batala Distt. Gurdaspur | 4164 | 3.8.18                 | 1              | ZO Lab Jal.                    | 14       | 48       | 284      | 174      | 146      | 18      | 22                   | 104     | 36      | 3       | 96          | BDL         | 0.5        | 1.6        | 1.0      | 0.14                      | 0.16   | 23      | 5.0    |
| 23   | River Beas at G.T. Road, under Bridge Near Kapurthalla (Pb)               | 1011 | 3.8.18                 | 2              | ZO Lab Jal.                    | 16       | 50       | 264      | 160      | 134      | 18      | 14                   | 111     | 34      | 6       | 98          | BDL         | BDL        | 1.4        | BDL      | 0.18                      | 0.12   | 18      | 4.3    |
| 24   | River Beas at U/s Goindwal  | 1696 | 3.8.18                 | 3              | ZO Lab Jal.                    | 14       | 44       | 232      | 170      | 140      | 12      | 18                   | 109     | 31      | 7       | 89          | BDL         | 0.6        | 1.2        | 1.0      | 0.14                      | 0.12   | 20      | 4.8    |
| 25   | River Beas at D/s Goindwal  | 1012 | 3.8.18                 | 4              | ZO Lab Jal.                    | 16       | 46       | 240      | 158      | 120      | 16      | 22                   | 107     | 30      | 8       | 92          | BDL         | 0.6        | 1.0        | 1.2      | 0.16                      | 0.14   | 20      | 4.3    |
| 26   | Beas at Harike  | 1697 | 27.8.18                | 29             | ZO Lab Jal.                    | 16       | 56       | 202      | 160      | 132      | 14      | 20                   | 110     | 29      | 6       | 102         | BDL         | 0.12       | 1.2        | 1.2      | 0.12                      | 0.16   | 19      | 5.0    |

Note. 1. BDL means Below Method Detection Limit

2. DBU means Designated Best Use (Class-A,B,C,D & E)

3. Water Quality Index ( S means Satisfactory, N means Not Satisfactory)

4. U/s means Upstream , D/s means Downstream

## Analysis results of Surface water monitoring under NWMP for the month of August, 2018

### River Ravi

| S.N. | Point of Sample Collection  | Code | Date of receipt in lab | Lab Sample No. | Sample Collected & Analyzed by | pH  | DO mg/l | BOD mg/l | Cond $\mu$ s/Cm | T.Coli MPN/100ml | F Coli MPN/100ml | Free Amm.N mg/l | SAR  | B mg/l | Quality of water as per DBU | Water Quality Index |
|------|-----------------------------|------|------------------------|----------------|--------------------------------|-----|---------|----------|-----------------|------------------|------------------|-----------------|------|--------|-----------------------------|---------------------|
| 27   | Ravi at U/s of Madhopur H/W | 1097 | 21.8.18                | 12             | ZO Lab Jal.                    | 7.6 | 7.9     | BDL      | 202             | 79               | 49               | BDL             | 0.56 | BDL    | B                           | S                   |

| S.N. | Point of Sample Collection  | Code | DOR in Lab | Lab Sample No. | Sample Collected & Analyzed by | COD mg/l | Turb NTU | TSS mg/l | TDS mg/l | FDS mg/l | Cl mg/l | SO <sub>4</sub> Mg/l | TH mg/l | Ca mg/l | Mg mg/l | T.Alkn mg/l | P.Alkn mg/l | Amn_N mg/l | NO <sub>3</sub> -N mg/l | TKN mg/l | PO <sub>4</sub> as P mg/l | F mg/l | Na mg/l | K mg/l |
|------|-----------------------------|------|------------|----------------|--------------------------------|----------|----------|----------|----------|----------|---------|----------------------|---------|---------|---------|-------------|-------------|------------|-------------------------|----------|---------------------------|--------|---------|--------|
| 27   | Ravi at U/s of Madhopur H/W | 1097 | 21.8.18    | 12             | ZO Lab Jal.                    | BDL      | 16       | 72       | 134      | 116      | 14      | 8                    | 90      | 25      | 6       | 68          | BDL         | BDL        | 0.6                     | BDL      | BDL                       | BDL    | 12      | 3.7    |

Note. 1. BDL means Below Method Detection Limit

2. DBU means Designated Best Use (Class-A,B,C,D & E)

3. Water Quality Index ( S means Satisfactory, N means Not Satisfactory)

## Analysis results of Surface water monitoring under NWMP for the month of August, 2018

### River Ghaggar

| S.N. | Point of Sample Collection   | Code | Date of receipt in lab | Lab Sample No. | Sample Collected & Analyzed by | pH  | DO mg/l | BOD mg/l | Cond $\mu$ s/Cm | T.Coli MPN/100ml | F. Coli MPN/100ml | Free Amm.N mg/l | SAR  | B mg/l | Quality of water as per DBU | Water Quality Index |
|------|--|------|------------------------|----------------|--------------------------------|-----|---------|----------|-----------------|------------------|-------------------|-----------------|------|--------|-----------------------------|---------------------|
| 28   | Ghaggar at Mubarikpur Rest House                                   | 1023 | 7.8.18                 | SW471          | H/o Lab Patiala                | 7.9 | 4.2     | 7        | 453             | 15000            | 2200              | 0.072           | 0.81 | 0.22   | D                           | N                   |
| 29   | Ghaggar at Bhankarpur  | 1295 | 7.8.18                 | SW 472         | H/o Lab Patiala                | 7.5 | 3.7     | 12       | 551             | 28000            | 4000              | 0.058           | 0.93 | 0.33   | E                           | N                   |
| 30   | Ghaggar at Chattbir  | 1698 | 7.8.18                 | SW 473         | H/o Lab Patiala                | 7.2 | 2.6     | 10       | 595             | 21000            | 3300              | 0.040           | 1.05 | 0.31   | E                           | N                   |
| 31   | Ghaggar at U/s Jharmal Nadi  | 1702 | 7.8.18                 | SW 474         | H/o Lab Patiala                | 7.6 | 3.8     | 9        | 541             | 22000            | 3200              | 0.068           | 1.04 | 0.15   | E                           | N                   |
| 32   | Ghaggar at D/s Jharmal Nadi  | 1701 | 7.8.18                 | SW 475         | H/o Lab Patiala                | 7.9 | 3.2     | 20       | 1035            | 28000            | 3400              | 0.194           | 2.30 | 0.22   | E                           | N                   |
| 33   | Ghaggar at U/s Dhakanshu Nallah                                    | 1699 | 7.8.18                 | SW 477         | H/o Lab Patiala                | 7.9 | 3.2     | 13       | 585             | 17000            | 2100              | 0.302           | 1.56 | 0.25   | E                           | N                   |
| 34   | Ghaggar at D/s Dhakanshu Nallah                                    | 1700 | 7.8.18                 | SW 478         | H/o Lab Patiala                | 7.7 | 2.8     | 15       | 598             | 24000            | 3300              | 0.261           | 2.29 | 0.31   | E                           | N                   |
| 35   | Ghaggar at Rattanheri  | 1473 | 16.8.18                | SW 486         | H/o Lab Patiala                | 7.1 | 1.2     | 47       | 607             | 43000            | 8400              | 0.003           | 1.53 | 0.22   | E                           | N                   |
| 36   | Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain) | 4159 | 16.8.18                | SW 489         | H/o Lab Patiala                | 7.4 | 3.5     | 10       | 422             | 17000            | 2600              | 0.054           | 0.80 | 0.24   | E                           | N                   |
| 37   | Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)  | 4160 | 16.8.18                | SW 491         | H/o Lab Patiala                | 7.2 | 2.6     | 28       | 621             | 35000            | 4600              | 0.033           | 2.19 | 0.28   | E                           | N                   |
| 38   | Ghaggar at Khanauri  | 1024 | 16.8.18                | SW 487         | H/o Lab Patiala                | 7.2 | 2.3     | 14       | 607             | 24000            | 4100              | 0.013           | 0.69 | 0.29   | E                           | N                   |
| 39   | Ghaggar at Moonak  | 1703 | 16.8.18                | SW 488         | H/o Lab Patiala                | 6.6 | 3.3     | 12       | 418             | 22000            | 3100              | BDL             | 0.88 | 0.25   | E                           | N                   |
| 40   | Ghaggar at U/s Sardulgarh  | 1705 | 27.8.18                | SW 535         | H/o Lab Patiala                | 7.1 | 1.2     | 19       | 608             | 28000            | 5800              | 0.002           | 1.58 | 0.20   | E                           | N                   |
| 41   | Ghaggar at D/s Sardulgarh  | 1704 | 27.8.18                | SW 536         | H/o Lab Patiala                | 7.3 | 1.0     | 24       | 617             | 35000            | 7000              | 0.042           | 1.64 | 0.23   | E                           | N                   |

| S.N. | Point of Sample Collection   | Code | Date of receipt in lab | Lab Sample No. | Sample Collected & Analyzed by | COD mg/l | Turb NTU | TSS mg/l | TDS mg/l | FDS mg/l | Cl mg/l | SO <sub>4</sub> Mg/l | TH mg/l | Ca mg/l | Mg mg/l | T.Alkn mg/l | P.Alkn mg/l | Amn_N mg/l | NO3-N mg/l | TKN mg/l | PO <sub>4</sub> as P mg/l | F mg/l | Na mg/l | K mg/l |
|------|--|------|------------------------|----------------|--------------------------------|----------|----------|----------|----------|----------|---------|----------------------|---------|---------|---------|-------------|-------------|------------|------------|----------|---------------------------|--------|---------|--------|
| 28   | Ghaggar at Mubarikpur Rest House                                   | 1023 | 7.8.18                 | SW471          | H/o Lab Patiala                | 34       | 560      | 576      | 305      | 268      | 24      | 20                   | 210     | 72      | 7       | 215         | BDL         | 1.6        | 0.31       | 2.7      | 0.12                      | 0.41   | 27      | 6      |
| 29   | Ghaggar at Bhankarpur  | 1295 | 7.8.18                 | SW 472         | H/o Lab Patiala                | 52       | 600      | 540      | 380      | 327      | 29      | 28                   | 269     | 80      | 17      | 273         | BDL         | 2.9        | 0.41       | 4.2      | 0.25                      | 0.43   | 35      | 9      |
| 30   | Ghaggar at Chattbir  | 1698 | 7.8.18                 | SW 473         | H/o Lab Patiala                | 42       | 650      | 622      | 387      | 321      | 51      | 36                   | 234     | 74      | 12      | 219         | BDL         | 4.0        | 0.46       | 5.6      | 0.33                      | 0.37   | 37      | 11     |
| 31   | Ghaggar at U/s Jharmal Nadi  | 1702 | 7.8.18                 | SW 474         | H/o Lab Patiala                | 38       | 350      | 357      | 357      | 301      | 32      | 23                   | 269     | 79      | 17      | 236         | BDL         | 2.7        | 0.56       | 4.0      | 0.54                      | 0.18   | 39      | 8      |
| 32   | Ghaggar at D/s Jharmal Nadi  | 1701 | 7.8.18                 | SW 475         | H/o Lab Patiala                | 80       | 330      | 302      | 661      | 530      | 146     | 41                   | 321     | 108     | 13      | 290         | BDL         | 4.3        | 0.65       | 6.4      | 0.33                      | 0.15   | 95      | 47     |
| 33   | Ghaggar at U/s Dhakanshu Nallah                                    | 1699 | 7.8.18                 | SW 477         | H/o Lab Patiala                | 54       | 370      | 327      | 374      | 308      | 61      | 31                   | 234     | 81      | 8       | 205         | BDL         | 6.7        | 0.39       | 9.6      | 0.58                      | 0.21   | 55      | 14     |
| 34   | Ghaggar at D/s Dhakanshu Nallah                                    | 1700 | 7.8.18                 | SW 478         | H/o Lab Patiala                | 64       | 500      | 333      | 407      | 326      | 59      | 34                   | 194     | 69      | 5       | 219         | BDL         | 8.7        | 0.42       | 12.6     | 0.47                      | 0.24   | 73      | 17     |
| 35   | Ghaggar at Rattanheri  | 1473 | 16.8.18                | SW 486         | H/o Lab Patiala                | 137      | 800      | 614      | 413      | 321      | 60      | 25                   | 242     | 76      | 13      | 261         | BDL         | 5.1        | 0.76       | 7.4      | 0.34                      | 0.38   | 55      | 13     |
| 36   | Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain) | 4159 | 16.8.18                | SW 489         | H/o Lab Patiala                | 48       | 850      | 782      | 296      | 254      | 34      | 18                   | 234     | 79      | 9       | 178         | BDL         | 3.6        | 0.48       | 5.6      | 0.21                      | 0.17   | 28      | 7      |
| 37   | Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)  | 4160 | 16.8.18                | SW 491         | H/o Lab Patiala                | 97       | 800      | 660      | 434      | 368      | 48      | 23                   | 246     | 84      | 9       | 253         | BDL         | 3.3        | 0.53       | 5.4      | 0.30                      | 0.23   | 79      | 24     |
| 38   | Ghaggar at Khanauri  | 1024 | 16.8.18                | SW 487         | H/o Lab Patiala                | 57       | 800      | 812      | 282      | 236      | 42      | 17                   | 234     | 65      | 17      | 170         | BDL         | 1.3        | 0.60       | 2.8      | 0.45                      | 0.21   | 24      | 5      |
| 39   | Ghaggar at Moonak  | 1703 | 16.8.18                | SW 488         | H/o Lab Patiala                | 47       | 650      | 1336     | 292      | 248      | 44      | 19                   | 218     | 73      | 9       | 174         | BDL         | 3.8        | 0.42       | 5.4      | 0.28                      | 0.19   | 30      | 8      |
| 40   | Ghaggar at U/s Sardulgarh  | 1705 | 27.8.18                | SW 535         | H/o Lab Patiala                | 67       | 370      | 184      | 444      | 368      | 64      | 22                   | 289     | 103     | 8       | 257         | BDL         | 4.0        | 0.60       | 6.8      | 0.29                      | 0.20   | 62      | 19     |
| 41   | Ghaggar at D/s Sardulgarh  | 1704 | 27.8.18                | SW 536         | H/o Lab Patiala                | 83       | 250      | 58       | 451      | 376      | 48      | 36                   | 277     | 97      | 9       | 265         | BDL         | 4.2        | 0.66       | 7.4      | 0.95                      | 0.23   | 63      | 22     |

**Note. 1. BDL means Below Method Detection Limit**

**2. DBU means Designated Best Use (Class-A,B,C,D & E)**

**3. Water Quality Index ( S means Satisfactory, N means Not Satisfactory)**

**4. U/s means Upstream , D/s means Downstream**

